# INFORMATION FOR DRY CREEK WRF ANNUAL BIOSOLIDS

REPORTS 2015

IDENTIFICATION No. WYSL - 22934

#### **EPA REGION 7**



## **BIOSOLIDS MANAGEMENT PROGRAM**

Date: January 11, 2016

To: All Major and Significant Minor Facilities in Wyoming

SUBJECT: 2015 BIOSOLIDS ANNUAL REPORT\*\*\*DUE ON OR BEFORE FEBRUARY 19, 2016\*\*\*

Dear Facility Manager:

The 40 CFR 503 regulations require and your EPA Biosolids Permit you to submit a biosolids annual report to EPA Region 7 on or before <u>February 19, 2016</u> detailing your biosolids information for <u>calendar year 2015</u>. \*If your wastewater treatment system did not use/dispose of biosolids <u>and</u> you did not dispose of biosolids in calendar year 2015 (e.g., lagoon system), you are still required to submit a partial 2015 annual biosolids report (i.e. the first page).\* If you are a lagoon system and you removed biosolids from a lagoon in 2015, you must complete a biosolids annual report. Mechanical treatment facilities are required to submit an annual biosolids report whether or not biosolids were used/disposed of during calendar year 2015.

Facilities that use/dispose of biosolids or facilities that removed biosolids in calendar year 2015 shall provide the following information in their 2015 Annual Biosolids Report:

- Biosolids produced or removed from the facility during calendar year 2015 in dry metric tons.
- Biosolids used/disposed of or land applied in 2015 in dry metric tons.
- Biosolids stored at the facility in 2015 in dry metric tons.
- Type of use/disposal practice(s).
- Analytical results of each pollutant required for your use/disposal practice. Look at the results. Do they make sense?
- A description of how the pathogen reduction requirements were met, including certification statements.
- A description of how the vector attraction reduction requirements were met, including certification statements.
- Descriptions of how the management practices were met, including any certification requirements.

- A description of how the land application site restrictions were met (if necessary), including any certification requirements.
- A list of each land application site and the annual whole biosolids application rate (in metric tons/hectare) applied to each site.
- Results of any additional monitoring completed on the biosolids completed during 2015.
- The location (street address, latitude and longitude, or section, township and range) of each site where biosolids were land applied and the number of hectares applied to at each site.
- The dates the biosolids were applied to each site.
- The cumulative amount of each pollutant in the biosolids applied to each site and the amount of biosolids applied to each site, if your biosolids were land applied and the pollutant concentrations exceeded Table 3 levels located in 40 CFR 503 (b) (3).

1 of 2

- Please review the General Facility Information and update the information as necessary.
- If a contract hauler was used, list the name and address.
- Any other information required from you in your biosolids-only NPDES permit (if you were issued one).

These sheets contain the details needed by Region 7 to assess compliance of you facility with 40 CFR 503 and your Biosolids Permit.

Please send originals to:

Submit to:
EPA Region 7
ATTN: BIOSOLIDS CENTER
WWPD/WENF
11201 Renner Boulevard
Lenexa, Kansas 66219

2 of 2



# **Board of Public Utilities**

# WATER RECLAMTION DIVISON

BOX 1469, 2416 Snyder Ave, Cheyenne, WY 82003(307)637-6460 Dry Creek WRF, 8911 Campstool Rd. (307)635-3163. Fax (307)635-6833

January 22, 2016

EPA Region 7 ATTN: Biosolids Center WWPD/WENF 11201 Renner Boulevard Lenexa, Kansas 66219

DEQ/Water Quality 122 W. 25<sup>th</sup> Street Herscehel Building 4<sup>Th</sup> Floor West Cheyenne, WY 82002

RE: Biosolids 2015 Annual Report for Dry Creek WRF: Permit No. WYG - 650002: Identification Sludge Permit No. WYSL - 22934.

The following 2015 date is for Dry Creek WRF, 8911 Campstool Rd. Cheyenne, WY 82007.

- 1. Biosolids produced during 2015 was 1,924.4 Metric Tons.
- 2. Biosolids use/disposed of land applied in 2015 was 742.53 Metric Tons. Biosolids hauled to the Cheyenne Landfill in 2015 was 544.05 Metric Tons. Cheyenne Landfill, 1461 Happy Jack Rd., 82009. Phone (307) 632-8315
- 3. Biosolids on site January 1, 2015 was 13,615.07 Metric Tons. On December 31, 2015 on site was 14,252.82 Metric Tons.
- 4. The type of use/disposed of practice in 2015 was land surface application of Class B Biosolids on the Brant Miller Ranch. All land application was applied at the rate is equal or less to the agronomic rate for site or sites. We disposed of some Biosolids to the Landfill.
- 5. See Attachment: 1 and Attachment: 13 for 2015 analytical data.
- 6. A description of how pathogen requirements were met is outlined in Attachment: 4 Pathogen Reduction, including a certification statement.

Page 1

- 7. A description of how the vector attraction was met is outline in Attachment: 5 Vector Attraction Reduction, including certification statement.
- 8. A description of how management practices were met is outlined in Attachment: 6 Management Practices, including certification statement.
- 9. A description of sites were met in Attachment: 3 Land Owner Agreement, and attachment: 7 Site Restriction, including certification statements. Also inspections on site or sites.
- 10. Annual whole Biosolids application rate information is contained in Attachment: 2 Biosolids Tracking Program.
- 11. Monitoring, on the heat exchanger was averaged monthly see, Attachment: 9 Dry Creek WRF Sludge temperature Heat Exchanger. Fecal, 6 times a year, see Attachment: 13 Dry Creek WRF Total Solids %, Volatile Solids %, and Fecal MPN/gm 6 times a year, also Geomeans. Dry Creek WRF has Zone A, B, C, D, E, and F.
- 12. The location latitude, longitude, township, and range of each site on which Biosolids has been applied, and the number of hectares applied on each site is in attachment: 2 Dates of Biosolids Tracking Program.
- 13. See Attachment: 2 Dates of Biosolids applied in the year 2015.
- 14. No cumulative amount of Biosolids was applied in the year 2015.
- 15. No changes and updates where added for General information for Dry Creek WRF in 2015.
- 16. No Contract hauler for 2015.
- 17. No other information required on our Biosolids NPDEs Permit No. WYSL 22934.

Page 2

#### ATTACHMENTS FOR 2015

Attachment: 1 Analytical Reports 96 chemical)

Attachment: 2 Biosolids Tracking Program

Attachment: 2 A dates of Biosolids Application

Attachment: 3 Land Owner Agreement

Attachment; 4 Pathogen Reductions

Attachment: 5 Vector Attraction Reduction

Attachment: 6 Management Practices

Attachment: 7 Site Restrictions

Attachment: 9 Dry Creek WRF Temperature Heat exchanger

Attachment: 12 Number of Loads hauled to Landfill in 2015 and

dates in which Biosolids was hauled.

Attachment: 13 Dry Creek WRF Total Solids %, Volatile Solids %,

Fecal MPN/gm and Geomeans.

Jim Hughes Division Manager Dry Creek WRF

Phil Clark Compliance Supervisor Dry Creek WRF

Prepared By: Chet Barkell Biosolids Program Coordinator; Dry Creek WRF.

Page 3

|  |   |   | IERS' SLUDGE   |   |  |  |
|--|---|---|--|---|--|--|
| TO DIGESTER  | AT THE DRY CRE  | EK WATER R  | ECLAMATION I   | FACILITY IN 2   | 2015   |  |
|  |   |   |  |   | Inf. Flow  |  |
| MONTH  | GALLONS   | DMT   | %SOLIDS  | LBS   | Monthly Average  |  |
| Jan  | 921,365   | 168.70  | 4.84   | 371,915   |  |  |
| Feb  | 911,262   | 139.27  | 4.04   | 307,037   | 5.03   |  |
| Mar  | 1,073,990   | 145.86  | 3.59   | 321,559   | 5.17   |  |
| Арг  | 977,955   | 141.32  | 3.82   | 311,565   | 6.14   |  |
| May  | 934,365   | 164.01  | 4.64   | 361,577   | 8.86   |  |
| Jun  | 934,181   | 173.87  | 4.92   | 383,321   | 7.80   |  |
| Jul  | 952,875   | 187.81  | 5.21   | 414,038   | 6.97   |  |
| Aug  | 943,305   | 155.94  | 4.37   | 343,795   | 5.70   |  |
| Sep  | 950,793   | 155.74  | 4.33   | 343,352   | 5.63   |  |
| Oct  | 1,017,065   | 167.75  | 4.36   | 369,829   | 6.03   |  |
| Nov  | 836,760   | 135.48  | 4.28   | 298,683   | 5.57   |  |
| Dec  | 875,570   | 132.49  | 4.00   | 292,090   | 5.36   |  |
| Total  | 11,329,486  | 1,868.26  | 52.40  | 4,118,760   | 72.96  |  |
| Average  | 944,124   | 155.69  | 4.37   | 343,230   | 6.08   |  |
|  |   |   |  |   |  |  |
| CROW CREEK V   | VATER RECLAMATION   | ON FACILITY F   | PRIMARY AND  |   |  |  |
|  | UDGE FROM CLAR  |   |  |   |  |  |
|  | WATER RECLAMAT  |   |  |   |  |  |
|  | HE SLUDGE IS DISC   |   |  |   |  |  |
| LINE TO DOV OF   |   |   |  |   |  |  |
| LINE TO DRY CH   | REEK WATER RECL   | AMATION FACI  | LITY   |   |  |  |
| THE TOTAL SOL  | REEK WATER RECLA  | AMATION FACI<br>REEK WATER  | LITY. RECLAMATION 4  |   |  |  |
| THE TOTAL SOL  | IDS FROM CROW C   | REEK WATER  | RECLAMATION A  | ARE   |  |  |
| THE TOTAL SOL  | REEK WATER RECLIUS FROM CROW C<br>S AN ESTIMATE OF  | REEK WATER  | RECLAMATION A  | ARE   |  | Crow Creek Flow  |
| THE TOTAL SOL<br>CALCULATED A  | IDS FROM CROW C   | REEK WATER  | RECLAMATION A  | ARE   | Inf Flow   |  |
| THE TOTAL SOL<br>CALCULATED A  | LIDS FROM CROW C<br>S AN ESTIMATE OF  | REEK WATER  | RECLAMATION A<br>TIVE .2 PERCENT   | ARE<br>FOF SOLIDS.  | Inf. Flow  | То   |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH  | LIDS FROM CROW C<br>S AN ESTIMATE OF<br>2015  | REEK WATER<br>A CONSERVA<br>DMT   | RECLAMATION A FIVE .2 PERCENT  %SOLIDS                                   | ARE OF SOLIDS.  | Monthly Average  | To<br>Dry Creek  |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan  | LIDS FROM CROW C<br>S AN ESTIMATE OF<br>2015<br>GALLONS   | REEK WATER<br>A CONSERVA  | RECLAMATION A FIVE .2 PERCENT  %SOLIDS  0.2                              | ARE TOF SOLIDS.  LBS 198,703  | Monthly Average 3.05   | To Dry Creek 1.0   |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan Feb  | 2015<br>GALLONS<br>11,912,626<br>10,523,862   | DMT 90.13 79.62   | RECLAMATION A FIVE .2 PERCENT  %SOLIDS  0.2  0.2                         | LBS<br>198,703<br>175,538   | Monthly Average<br>3.05<br>2.73  | To<br>Dry Creek<br>1.0<br>1.2                                  |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan Feb Mar  | S AN ESTIMATE OF  2015  GALLONS  11,912,626   | DMT 90.13   | RECLAMATION A FIVE .2 PERCENT  %SOLIDS  0.2  0.2  0.2                    | LBS<br>198,703<br>175,538<br>195,657  | 3.05<br>2.73<br>2.62   | To Dry Creek 1.0 1.2 1.3                                       |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan Feb Mar Apr  | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018   | DMT 90.13 79.62 88.75   | %SOLIDS 0.2 0.2 0.2 0.2  | LBS<br>198,703<br>175,538<br>195,657<br>191,717   | Monthly Average<br>3.05<br>2.73<br>2.62<br>2.63  | To Dry Creek 1.0 1.2 1.3 1.5                                   |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb  Mar  Apr  May  | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802   | DMT 90.13 79.62 88.75 86.96   | %SOLIDS 0.2 0.2 0.2 0.2 0.2 0.2  | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165  | 3.05<br>2.73<br>2.62<br>2.63<br>3.86   | To Dry Creek 1.0 1.2 1.3 1.5 2.1                               |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb Mar Apr May Jun   | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786   | DMT<br>90.13<br>79.62<br>88.75<br>86.96<br>88.98<br>91.47                                     | ## ## ## ## ## ## ## ## ## ## ## ## ##                                   | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658   | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62   | To Dry Creek 1.0 1.2 1.3 1.5 2.1                               |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb Mar Apr May Jun Jul   | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509   | DMT 90.13 79.62 88.75 86.96 88.98   | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729  | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41                                   | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9                           |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb Mar Apr May Jun Jul Aug   | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920<br>13,810,958   | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30  | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932   | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05                           | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8                       |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep                                       | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920<br>13,810,958   | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49                                   | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367  | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05<br>2.63                   | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2                   |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan Feb Mar Apr May Jun Jul Aug Sep Oct                                      | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920   | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25  | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866   | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05<br>2.63<br>2.59           | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.2 1.4           |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov                                  | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920<br>13,810,958<br>13,601,059                             | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91                            | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395                                    | Monthly Average 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57                 | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.2 1.4 1.5       |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec                              | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920<br>13,810,958<br>13,601,059<br>13,033,266<br>11,473,597 | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81                | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380                         | Monthly Average 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57 2.62            | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.2 1.4 1.5 2.6  |
| THE TOTAL SOL CALCULATED A Crow Creek MONTH Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Total                        | 2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920<br>13,810,958<br>13,601,059<br>13,033,266               | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61                      | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395                                    | Monthly Average 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57                 | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.4 1.5 2.6 19.1  |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb War Apr May Jun Jul Aug Sep Oct Nov Dec Fotal Average             | 2015 GALLONS 11,912,626 10,523,862 11,730,018 11,493,802 11,760,509 12,089,786 13,652,847 11,266,920 13,810,958 13,601,059 13,033,266 11,473,597 146,349,250 12,195,771                 | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81 1,107.28 92.27 | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380<br>2,441,105<br>203,425 | Monthly Average 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57 2.62 35.38 2.95 | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.4 1.5 2.6 19.1  |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Total Average  Crow Creek | 2015 GALLONS 11,912,626 10,523,862 11,730,018 11,493,802 11,760,509 12,089,786 13,652,847 11,266,920 13,810,958 13,601,059 13,033,266 11,473,597 146,349,250 12,195,771                 | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81 1,107.28 92.27 | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380<br>2,441,105<br>203,425 | Monthly Average 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57 2.62 35.38 2.95 | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.4 1.5 2.6 19.1 |
| THE TOTAL SOL CALCULATED A  Crow Creek  MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Total Average             | 2015 GALLONS 11,912,626 10,523,862 11,730,018 11,493,802 11,760,509 12,089,786 13,652,847 11,266,920 13,810,958 13,601,059 13,033,266 11,473,597 146,349,250 12,195,771                 | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81 1,107.28 92.27 | ## RECLAMATION A FIVE .2 PERCENT  ## ## ## ## ## ## ## ## ## ## ## ## ## | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380<br>2,441,105<br>203,425 | Monthly Average 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57 2.62 35.38 2.95 |  |

| Sludge Loads | s From Beds To Zoi | nes      |             |              |            |              | 1              |
|--------------|--------------------|----------|-------------|--------------|------------|--------------|----------------|
|              |                    |          |             |              |            |              |                |
|              | Dry Creek WRF      | Semi Dry | Semi Dry    | Semi Dry     | Semi Dry   | Drying       | +              |
|              | Load Semi Dry      | US Tons  | Me Tons     | Cu/Yards     | LBS        | Bed          | -              |
| 2015         | Sludge             | Sludge   | Sludge      | Sludge       | Sludge     | #            | <del> </del> - |
| Month        |                    |          |             |              |            |              |                |
|              |                    |          |             |              |            |              |                |
| January      | 45                 | 337.5    | 306         | 675          | 675,000    | 2            |                |
| February     | 38                 | 285      | 258.4       | 570          | 570,000    | 3            |                |
| Mach         | 73                 | 547.5    | 496.4       |              | 1,095,000  | 3&1          |                |
| April        | 63.5               | 435      | 431.8       |              | 952,500    | 1            |                |
| May          | 58                 | 435      | 394.4       | 870          | 870,000    | 1&4          |                |
| June         | 64.5               | 483.75   | 438.6       | 968          | 967,500    | 4&2          |                |
| July         | 63.5               | 476.25   | 431.8       | 953          | 952,500    | 2            |                |
| August       | 71.5               | 536.25   | 486.2       | 1,073        | 1,072,500  | 2&3          |                |
| September    | 66.5               | 498.75   | 452.2       | 998          | 997,500    | 3,1, & 4     |                |
| October      | 68                 | 510      | 462.4       | 1,020        | 1,020,000  | 1 & 4        |                |
| November     | 64                 | 480      | 435.2       | 960          | 960,000    | 4            |                |
| December     | 65                 | 487.5    | 442         | 975          | 975,000    | 4,3 & 1      |                |
| Total        | 740.5              | 5512.5   | 5035.4      | 11,108       | 11,107,500 |              |                |
|              |                    |          |             |              |            |              |                |
| Date         | Dry Loads          | Dry Tons | Dry Me Tons | Dry Cu/Yards | Dry LBS    | Drying Bed # | Zone Area      |
| 2/24/2015    | 32                 | 240      | 217.6       | 480          | 480,000    | 1            | F              |
| 2/25/2015    | 8                  | 60       | 54.4        | 120          | 120,000    | 1            | F              |
| 5/15/2015    | 32                 | 240      | 217.6       | 480          | 480,000    | 4            | D              |
| 6/23/2015    | 32                 | 240      | 217.6       | 480          | 480,000    | 2            | D              |
| 7/24/2015    | 35                 | 262.5    | 238         | 525          | 525,000    | 3            | D              |
| 8/12/2015    | 39                 | 292.5    | 265.2       | 585          | 585,000    | 1            | D              |
| 8/13/2015    | 40                 | 300      | 272         | 600          | 600,000    | 4            | Α              |
| 8/26/2015    | 36                 | 270      | 244.8       | 648          | 540,000    | 2            | Α              |
| 11/3/2015    | 20                 | 150      | 136         | 300          | 300,000    | 3            | D              |
| 11/23/2015   | 9                  | 67.5     | 61.2        | 135          | 135,000    | 3            | D              |
| Total        | 283                | 2,122.5  | 1,924.4     | 4,353        | 4,245,000  |              | =              |

|  | AT THE DRY CREE  |   |  |   | 010  |  |
|--|--|---|--|---|--|--|
|  |  |   |  |   | Inf. Flow  |  |
| MONTH  | GALLONS  | DMT   | %SOLIDS  | LBS   | Monthly Average  |  |
| Jan  | 921,365  | 168.70  | 4.84   | 371,915   | 4.70   |  |
| Feb  | 911,262  | 139.27  | 4.04   | 307,037   | 5.03   |  |
| Mar  | 1,073,990  | 145.86  | 3.59   | 321,559   | 5.17   |  |
| Apr  | 977,955  | 141.32  | 3.82   | 311,565   | 6.14   |  |
| May  | 934,365  | 164.01  | 4.64   | 361,577   | 8.86   |  |
| Jun  | 934,181  | 173.87  | 4.92   | 383,321   | 7.80   |  |
| Jul  | 952,875  | 187.81  | 5.21   | 414,038   | 6.97   |  |
| Aug  | 943,305  | 155.94  | 4.37   | 343,795   | 5.70   |  |
| Sep  | 950,793  | 155.74  | 4.33   | 343,352   | 5.63   |  |
| Oct  | 1,017,065  | 167.75  | 4.36   | 369,829   | 6.03   |  |
| Nov  | 836,760  | 135.48  | 4.28   | 298,683   | 5.57   |  |
| Dec  | 875,570  | 132.49  | 4.00   | 292,090   | 5.36   |  |
| Total  | 11,329,486   | 1,868.26  | 52.40  | 4,118,760   | 72.96  |  |
| Average  | 944,124  | 155.69  | 4.37   | 343,230   | 6.08   |  |
| SECONDARY SL   | VATER RECLAMATION UDGE FROM CLARIF WATER RECLAMATION   | IERS ARE BEI  | NG PUMPED  |   |  |  |
|  |  |   |  |   |  |  |
| PROCESSED. TH<br>LINE TO DRY CR<br>THE TOTAL SOL   | HE SLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A  | ARGED IN THI<br>MATION FACIL<br>EEK WATER F   | EINTERCEPTOR<br>LITY.<br>RECLAMATION AR  |   |  |  |
| PROCESSED. THE TO DRY CRETHE TOTAL SOLUTION AND CALCULATED A   | HE SLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A  | ARGED IN THI<br>MATION FACIL<br>EEK WATER F   | EINTERCEPTOR<br>LITY.<br>RECLAMATION AR  |   |  | Crow Creek Flov  |
| PROCESSED. TH<br>LINE TO DRY CR<br>THE TOTAL SOL<br>CALCULATED A<br>Crow Creek   | HE SLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015  | ARGED IN THI<br>MATION FACIL<br>EEK WATER I<br>CONSERVAT                                      | E INTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  | OF SOLIDS.  | Inf. Flow  | Crow Creek Flow  |
| PROCESSED. THE LINE TO DRY CRITHE TOTAL SOL CALCULATED A Crow Creek  | HE SLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS   | ARGED IN THI MATION FACIL EEK WATER F CONSERVAT   | EINTERCEPTOR<br>LITY.<br>RECLAMATION AR  |   | Inf. Flow<br>Monthly Average   |  |
| PROCESSED. THE LINE TO DRY CRITHE TOTAL SOL CALCULATED A Crow Creek MONTH  | HE SLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626   | ARGED IN THI<br>MATION FACIL<br>EEK WATER I<br>CONSERVAT                                      | E INTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  | OF SOLIDS.  |  | To<br>Dry Creek  |
| PROCESSED. THE LINE TO DRY CRITHE TOTAL SOL CALCULATED A Crow Creek MONTH  Jan Feb   | RESLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862  | ARGED IN THI MATION FACIL EEK WATER F CONSERVAT  DMT 90.13 79.62                              | E INTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  | DF SOLIDS.  | Monthly Average  | To Dry Creek 1.0   |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED A CROW Creek MONTH  Jan Feb Mar   | RESLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018  | ARGED IN THI MATION FACIL EEK WATER F CONSERVAT  DMT 90.13                                    | E INTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  %SOLIDS  0.2  | LBS<br>198,703  | Monthly Average 3.05   | To Dry Creek 1.0 1.2   |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED A CROW Creek MONTH  Jan Feb Mar Apr   | RESLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802  | ARGED IN THI MATION FACIL EEK WATER F CONSERVAT  DMT 90.13 79.62                              | E INTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  %SOLIDS  0.2 0.2  | LBS<br>198,703<br>175,538   | Monthly Average<br>3.05<br>2.73  | To<br>Dry Creek<br>1.0<br>1.2<br>1.3                           |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED A CROW Creek MONTH  Jan Feb Mar Apr   | RESLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018  | ARGED IN THI MATION FACIL EEK WATER F CONSERVAT  DMT 90.13 79.62 88.75                        | EINTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  %SOLIDS  0.2 0.2 0.2 0.2   | LBS<br>198,703<br>175,538<br>195,657  | Monthly Average<br>3.05<br>2.73<br>2.62  | To Dry Creek 1.0 1.2 1.3 1.5                                   |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED AND CROWNER MONTH  Jan Feb Mar Apr May Jun  | RESLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786  | ARGED IN THI MATION FACIL EEK WATER FACONSERVAT  DMT 90.13 79.62 88.75 86.96                  | EINTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  %SOLIDS  0.2 0.2 0.2 0.2 0.2   | LBS<br>198,703<br>175,538<br>195,657<br>191,717   | 3.05<br>2.73<br>2.62<br>2.63   | To Dry Creek 1.0 1.2 1.3 1.5 2.1                               |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED AS MONTH  Jan Feb Mar Apr May Jun   | RESLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509  | ARGED IN THI MATION FACIL EEK WATER F A CONSERVAT  DMT 90.13 79.62 88.75 86.96 88.98          | EINTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  %SOLIDS  0.2 0.2 0.2 0.2 0.2 0.2 0.2   | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658   | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62   | To Dry Creek 1.0 1.2 1.3 1.5 2.1                               |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLE CALCULATED A MONTH  Jan Feb Mar Apr May Jun Jul   | RESLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786  | ARGED IN THI MATION FACIL EEK WATER F CONSERVAT  DMT 90.13 79.62 88.75 86.96 88.98 91.47      | EINTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  %SOLIDS  0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2   | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729  | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41                                 | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8                       |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLE CALCULATED AT MONTH  Jan Feb Mar Apr May Jun Jul Aug  | RE SLUDGE IS DISCH<br>REEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847   | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30  | EINTERCEPTOR LITY. RECLAMATION AR IVE .2 PERCENT (  %SOLIDS  0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.  | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932   | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05                         | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8                       |
| PROCESSED. THE LINE TO DRY CRITHE TOTAL SOLE CALCULATED AT CRITHER MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep                                    | E SLUDGE IS DISCHEEK WATER RECLAIDS FROM CROW CRES AN ESTIMATE OF A 2015  GALLONS  11,912,626  10,523,862  11,730,018  11,493,802  11,760,509  12,089,786  13,652,847  11,266,920  13,810,958  | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49                                   | ### SOLIDS    0.2  | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367  | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05<br>2.63                 | To Dry Creek 1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2                   |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLE CALCULATED AT CREED MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct                                  | E SLUDGE IS DISCHEEK WATER RECLAIDS FROM CROW CRES AN ESTIMATE OF A 2015  GALLONS  11,912,626  10,523,862  11,730,018  11,493,802  11,760,509  12,089,786  13,652,847  11,266,920  13,810,958  13,601,059  | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91                            | ### SOLIDS    0.2  | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866   | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05<br>2.63<br>2.59         | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.2 1.4          |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLE CALCULATED AT CROW Creek MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov                         | E SLUDGE IS DISCHEEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920<br>13,810,958<br>13,601,059<br>13,033,266       | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61                      | **SOLIDS*** 0.2** 0.2** | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395                                    | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05<br>2.63<br>2.59         | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.2 1.4 1.5      |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLE CALCULATED AT CREED MAIN MAY JUN AUG SEP Oct Nov Occ  | E SLUDGE IS DISCHEEK WATER RECLAI  IDS FROM CROW CR S AN ESTIMATE OF A  2015  GALLONS  11,912,626  10,523,862  11,730,018  11,493,802  11,760,509  12,089,786  13,652,847  11,266,920  13,810,958  13,601,059  13,033,266  11,473,597                          | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81                | ### SOLIDS    SOLIDS   | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380                         | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05<br>2.63<br>2.59<br>2.57 | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.2 1.4 1.5 2.6  |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED AND CREEK MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Fotal                    | E SLUDGE IS DISCHEEK WATER RECLAI<br>IDS FROM CROW CR<br>S AN ESTIMATE OF A<br>2015<br>GALLONS<br>11,912,626<br>10,523,862<br>11,730,018<br>11,493,802<br>11,760,509<br>12,089,786<br>13,652,847<br>11,266,920<br>13,810,958<br>13,601,059<br>13,033,266       | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61                      | **SOLIDS*** 0.2** 0.2** | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395                                    | 3.05<br>2.73<br>2.62<br>2.63<br>3.86<br>3.62<br>3.41<br>3.05<br>2.63<br>2.59         | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.4 1.5 2.6 19.1 |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED AND CREEK MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Total Average            | E SLUDGE IS DISCHEEK WATER RECLAI  IDS FROM CROW CR S AN ESTIMATE OF A  2015  GALLONS  11,912,626  10,523,862  11,730,018  11,493,802  11,760,509  12,089,786  13,652,847  11,266,920  13,810,958  13,601,059  13,033,266  11,473,597  146,349,250  12,195,771 | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81 1,107.28 92.27 | ### SOLIDS    SOLIDS   Color   | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380<br>2,441,105<br>203,425 | 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57 2.62 35.38 2.95               | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.4 1.5 2.6 19.1 |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLICALCULATED AND CREEK MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Fotal Average Crow Creek | E SLUDGE IS DISCHEEK WATER RECLAIDS FROM CROW CRES AN ESTIMATE OF A 2015  GALLONS 11,912,626 10,523,862 11,730,018 11,493,802 11,760,509 12,089,786 13,652,847 11,266,920 13,810,958 13,601,059 13,033,266 11,473,597 146,349,250 12,195,771                   | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81 1,107.28 92.27 | ### SOLIDS    SOLIDS   Color   | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380<br>2,441,105<br>203,425 | 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57 2.62 35.38 2.95               | To Dry Creek  1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.4 1.5 2.6 19.1 |
| PROCESSED. THE LINE TO DRY CRETHE TOTAL SOLE CALCULATED AND CREEK MONTH  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Total Average           | E SLUDGE IS DISCHEEK WATER RECLAI  IDS FROM CROW CR S AN ESTIMATE OF A  2015  GALLONS  11,912,626  10,523,862  11,730,018  11,493,802  11,760,509  12,089,786  13,652,847  11,266,920  13,810,958  13,601,059  13,033,266  11,473,597  146,349,250  12,195,771 | DMT 90.13 79.62 88.75 86.96 88.98 91.47 103.30 85.25 104.49 102.91 98.61 86.81 1,107.28 92.27 | ### SOLIDS    SOLIDS   Color   | LBS<br>198,703<br>175,538<br>195,657<br>191,717<br>196,165<br>201,658<br>227,729<br>187,932<br>230,367<br>226,866<br>217,395<br>191,380<br>2,441,105<br>203,425 | 3.05 2.73 2.62 2.63 3.86 3.62 3.41 3.05 2.63 2.59 2.57 2.62 35.38 2.95               | 1.0 1.2 1.3 1.5 2.1 1.9 1.8 1.2 1.4 1.5 2.6 19.1               |

| Monthly   | Total Inf. | Total Raw | % Raw  | Digester | Sec. Digester | % Volatile  | Sec. Digester |
|-----------|------------|-----------|--------|----------|---------------|-------------|---------------|
| Average   | (mgd)      | Sludge    | Sludge | Temp.    | рН            | Destruction | Detion Time:  |
| 2015      |            |           |        |          |               |             | Days          |
| Jannuary  | 4.70       | 21,726    | 4.84   | 89.60    | 7.35          | 43.1        | 24            |
| Febuary   | 5.00       | 27,836    | 4.04   | 89.28    | 7.25          | 47.3        | 22            |
| March     | 5.17       | 28,006    | 3.59   | 89.02    | 7.27          | 53.6        | 20            |
| April     | 6.14       | 2,410     | 3.82   | 91.49    | 7.31          | 52.1        | 22            |
| May       | 8.86       | 22,432    | 4.64   | 95.60    | 7.4           | 55.1        | 18            |
| June      | 7.83       | 23,690    | 4.92   | 91.84    | 7.43          | 58.8        | 17            |
| July      | 6.97       | 23,671    | 5.21   | 93.03    | 7.48          | 57.9        | 18            |
| August    | 5.70       | 23,410    | 4.37   | 94.60    | 7.47          | 55.9        | 18            |
| September | 5.63       | 23,520    | 4.33   | 95.22    | 7.44          | 53.2        | 19            |
| October   | 6.03       | 23,952    | 4.36   | 94.33    | 7.39          | 50.7        | 21            |
| November  | 5.57       | 20,060    | 4.28   | 93.47    | 7.44          | 49.7        | 21            |
| December  | 5.36       | 20,119    | 4.00   | 90.00    | 7.29          | 48.0        | 21            |
| Total     | 72.98      | 260,832   | 52.4   | 1,107.48 | 88.52         | 625.4       | 241           |
| Average   | 6.08       | 21,736    | 4.37   | 92.29    | 7.38          | 52.12       | 20.08         |

Attachment: #4.
Dry Creek Water Reclamation Facility

F. Pathogen reduction is accomplished through anaerobic digestion. The primary and secondary digested sludge is treated in the absence of air for mean cell residence time and temperature between 25 and 35 days at 92 to 100 degrees Fahrenheit. Air dried sludge is obtained with a tractor aerator on paved drying beds and on site unpaved storage area in windrows that are turned approximately once a month dependant on the weather conditions.

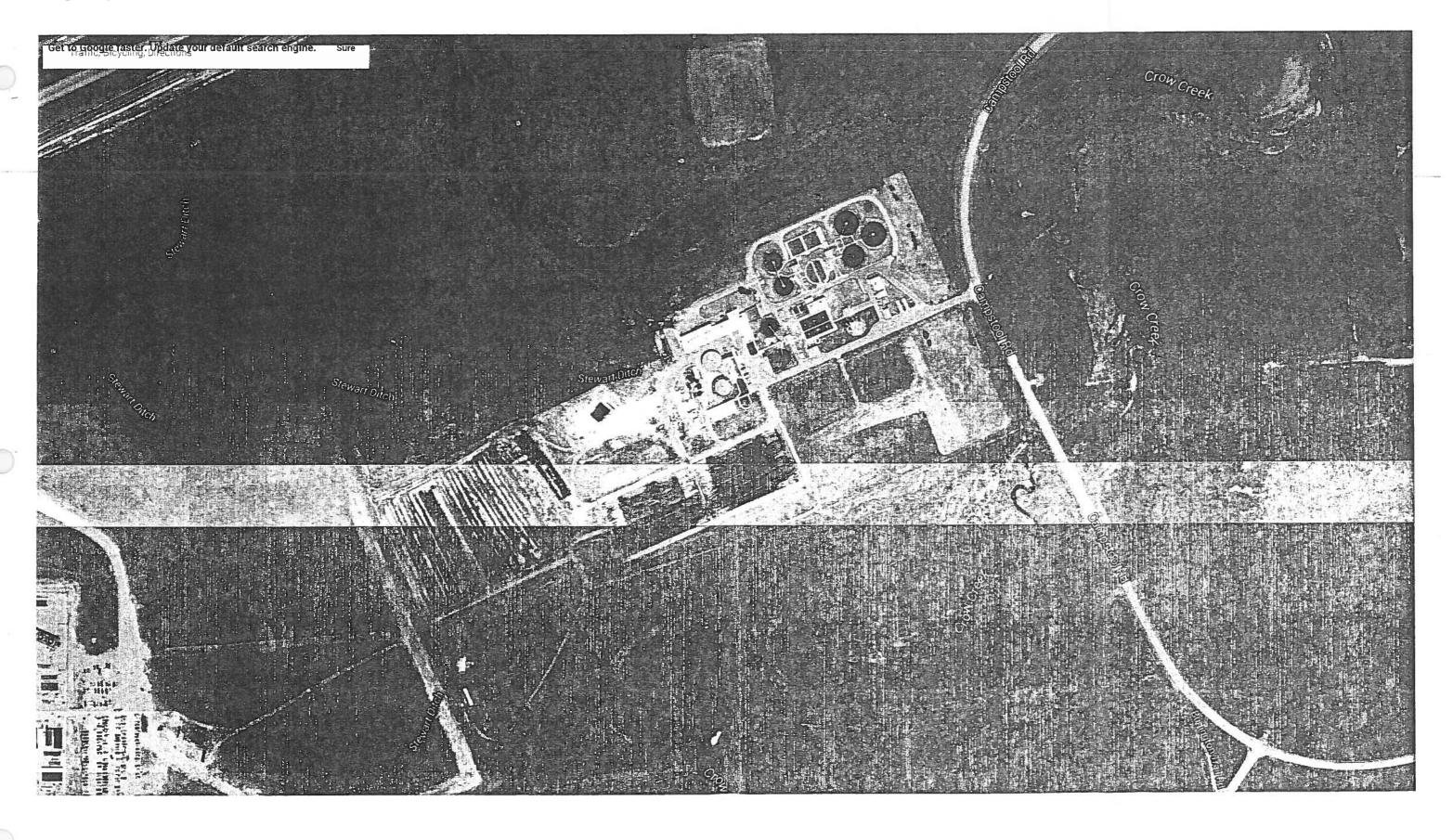
The Biosolids production (dry weight) at the Dry Creek WRF is over 1500 metric tons a year. Therefore samples are collected six times a year (February, April, May, June, August, October, and December). The laboratories analyze the dry samples for metals, nutrients, organics pathogens, volatile solids and total solids.

### CERTIFICATION STATEMENT

I certify under the penalty of law, that the pathogen requirements in Part I.C.3, the management practices in Part I.D (if necessary) (including the practice in part I.D.13 if the table 4 annual pollutant limits are used) and the site restrictions in Part I.C.2 (if necessary) have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that pathogen requirements, the vector attraction reduction requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.

|             | Slu  |                                 |   |
|-------------|--|---------------------------------|---|
|             | dge Dewat  |                                 |   |
|             | ering<br>ary Digest  | dge Thick                       |   |
| Fuel        |  |                                 |   |
| Cell Labo   |  | Primai<br>Indiuent<br>retreatme |   |
| ratory      |  | y Clarific                      | P No  |
| dminist rai | OHIGHOUR AND A STREET OF THE S |                                 | Integra<br>Sludge<br>Shriman<br>The Priman                        |
| Pump Ho     | South Pri  |                                 | Integrated Fixed-Film<br>Sludge Basins (IFAS)<br>Primary<br>Jouse |
| USe         | mary   |                                 | Activ   |
|             | App ac B   | Bijoyweji Bu                    | atted   |
|             | asins<br>Building  | adding (                        |   |
|             | ٥ مالي   |                                 | n Secondar<br>House<br>Seco                                       |
|             | Il Storage I   | uilding<br>potable B            | econdary<br>louse<br>Secondary<br>Clarifiers                      |
|             | Oil Storage Building   | uilding*                        |   |
|             |  |                                 |   |

Google Maps



#### Attachment: #5.

## Dry Creek Water Reclamation Facility

G. Vector attraction reduction requirements are met through anaerobic digestion when there is thirty eight percent or more reduction in volatile solids. Volatile solids destruction is measured weight by volume average ((Vol. Solids Reduction = VS in - VS out / (VS in -((VS in \* VS out)) (Use Average). The sludge is also air dried in windrows for further vector attraction reduction. The dry solids in windrows are between 65% to 80% total volatile solids reduction before land application.

RE: Flows From: Primary North and Primary South Raw sludge Average: Total solids (change % to Mg/l (10000) (NRS & SRS)

Total Vol Solids (NRS & SRS): Total C-2 (wasting) cake flow gal: C-1 (digested) Solids (mg/L) cake: C-1 Vol solids cake (mg/L): C-2 solids cake (mg/L): C-2 Vol Solids cake (mg/L) Cake flow from Rotary Drum Thicker to digester.

#### CERTIFICATION STATEMENT

I certify under the penalty of law, that the pathogen requirements in Part I.C.2, one of the vector attraction reduction alternatives in Part I.C.3, the management practices in part I.D (if necessary) (including the practices in Part I.D.13 if the table 4 annual pollutant limits are used) and the site restrictions in part I.C.2 (If necessary) have been met. This determination has been made under my direction and supervision in accordance with the information used to determine that the pathogen requirements, the vector attraction reduction requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.

Attachment: #6.

Dry Creek Water Reclamation Facility

H. Best management practices are accomplished by applying biosolids at a whole sludge application rate that is less than or equal to the agronomic rate for the specific site and plant species. The Biosolids are applied so that it does not adversely affect a threatened or endangered species.

Biosolids are not dispersed on sites that are flooded or snow covered, frozen ground with a slope of three percent or more to prevent run off into wetland or surface water. A buffer zone of thirty-five feet from waterways, stock wells, and surface water is observed. Biosolids land applications are prohibited to sites where the available phosphorous content of the existing soil exceeds 400 pounds per acre.

Stored Biosolids on the plant facility remain in windrows for two years or less. The Biosolids are land applied in the winter, spring and fall of the year, weather permitting. Biosolids and soil are analytically tested before disposal. Cheyenne's sludge management practice ensures compliance with both Federal and State parameters and provides for long term Biosolids procedures with little or no detriment to the environment, while enhancing the native grass and field crop production of those participating ranchers and farmers who utilize Biosolids as a fertilizer supplement and soil conditioner.

#### CERTIFICATION STATEMENT

I certify under the penalty of law that the pathogen requirements in Part I.C.2, one of the vector attraction reduction alternatives in Part I.C.3, the management practices in part I.D (if necessary) (including in the practices in Part I.D.13 if the table 4 annual pollutant limits are used) and the site restrictions in Part I.C.2 (if necessary) have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personal properly gather and evaluate the information used to determine that the pathogen requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.

#### Attachment: #7.

# Dry Creek Water Reclamation Facility

I. Site restrictions are first achieved through the quality of sewage sludge product which has been stabilized to reduce pathogenic organisms, which has been dried to a solids concentration of sixty percentile or greater and contains no hazardous or toxic compounds or chemicals in concentrations which exceed those authorized by the USA EPA REGION VIII and WYOMING DEQ for land application in Part C.1, Specific Limitations and Self Monitoring Requirements and Chemical Pollutant Limitations.

The dry sludge that is produced is class A and B which are applied primarily to range land. Before applying sewage sludge on rangeland, pastureland, farm land, or fields, soil samples have been collected and have had the appropriate soil analysis conducted.

The <u>Class B</u> Sludge with respect to pathogens has been in compliance with the entire site restrictions listed in Part I.C.2. No sludge or material derived from sludge exceeds the limits in Table 3 Part I.C.1. The <u>Class A</u> pathogen reduction limits in Part I.C.2 meets the first 4 vector attraction reduction alternatives in Part I.C.3. There are sufficient management practices used to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of sludge to the environment, a threat to human health or a nuisance.

#### CERTIFICATION STATEMENT

I certify under the penalty of law, that the pathogen requirements in Part I.C.2, one of the vector attraction reduction alternatives in Part I.C.3, the management practices in Part I.D (if necessary) including the practice in Part I.D.13 if the table 4 annual pollutant limits are used) and the site restrictions in Part I.C.2 (if necessary) have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements, the vector attractions reduction requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.

# Attachment: #5. Dry Creek Water Reclamation Facility

G. Vector attraction reduction requirements are met through anaerobic digestion when there is thirty eight percent or more reduction in volatile solids. Volatile solids destruction is measured weight by volume average ((Vol. Solids Reduction = VS in - VS out / (VS in -((VS in \* VS out)) (Use Average). The sludge is also air dried in windrows for further vector attraction reduction. The dry solids in windrows are between 65% to 80% total volatile solids reduction before land application.

RE: Flows From: Primary North and Primary South Raw sludge Average: Total solids (change % to Mg/l (10000) (NRS & SRS):

Total Vol Solids (NRS & SRS): Total C-2 (wasting) cake flow gal: C-1 (digested) Solids (mg/L) cake: C-1 Vol solids cake (mg/L): C-2 solids cake (mg/L): C-2 Vol Solids cake (mg/L) Cake flow from Rotary Drum Thicker to digester.

#### CERTIFICATION STATEMENT

I certify under the penalty of law, that the pathogen requirements in Part I.C.2, one of the vector attraction reduction alternatives in Part I.C.3, the management practices in part I.D (if necessary) (including the practices in Part I.D.13 if the table 4 annual pollutant limits are used) and the site restrictions in part I.C.2 (If necessary) have been met. This determination has been made under my direction and supervision in accordance with the information used to determine that the pathogen requirements, the vector attraction reduction requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.

# Attachment: #6. Dry Creek Water Reclamation Facility

H. Best management practices are accomplished by applying biosolids at a whole sludge application rate that is less than or equal to the agronomic rate for the specific site and plant species. The Biosolids are applied so that it does not adversely affect a threatened or endangered species.

Biosolids are not dispersed on sites that are flooded or snow covered, frozen ground with a slope of three percent or more to prevent run off into wetland or surface water. A buffer zone of thirty-five feet from waterways, stock wells, and surface water is observed. Biosolids land applications are prohibited to sites where the available phosphorous content of the existing soil exceeds 400 pounds per acre.

Stored Biosolids on the plant facility remain in windrows for two years or less. The Biosolids are land applied in the winter, spring and fall of the year, weather permitting. Biosolids and soil are analytically tested before disposal. Cheyenne's sludge management practice ensures compliance with both Federal and State parameters and provides for long term Biosolids procedures with little or no detriment to the environment, while enhancing the native grass and field crop production of those participating ranchers and farmers who utilize Biosolids as a fertilizer supplement and soil conditioner.

## CERTIFICATION STATEMENT

I certify under the penalty of law that the pathogen requirements in Part I.C.2, one of the vector attraction reduction alternatives in Part I.C.3, the management practices in part I.D (if necessary) (including in the practices in Part I.D.13 if the table 4 annual pollutant limits are used) and the site restrictions in Part I.C.2 (if necessary) have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personal properly gather and evaluate the information used to determine that the pathogen requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.

Attachment: #7.

Dry Creek Water Reclamation Facility

I. Site restrictions are first achieved through the quality of sewage sludge product which has been stabilized to reduce pathogenic organisms, which has been dried to a solids concentration of sixty percentile or greater and contains no hazardous or toxic compounds or chemicals in concentrations which exceed those authorized by the USA EPA REGION VIII and WYOMING DEQ for land application in Part C.1, Specific Limitations and Self Monitoring Requirements and Chemical Pollutant Limitations.

The dry sludge that is produced is class A and B which are applied primarily to range land. Before applying sewage sludge on rangeland, pastureland, farm land, or fields, soil samples have been collected and have had the appropriate soil analysis conducted.

The Class B Sludge with respect to pathogens has been in compliance with the entire site restrictions listed in Part I.C.2. No sludge or material derived from sludge exceeds the limits in Table 3 Part I.C.1. The Class A pathogen reduction limits in Part I.C.2 meets the first 4 vector attraction reduction alternatives in Part I.C.3. There are sufficient management practices used to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of sludge to the environment, a threat to human health or a nuisance.

# CERTIFICATION STATEMENT

I certify under the penalty of law, that the pathogen requirements in Part I.C.2, one of the vector attraction reduction alternatives in Part I.C.3, the management practices in Part I.D (if necessary) including the practice in Part I.D.13 if the table 4 annual pollutant limits are used) and the site restrictions in Part I.C.2 (if necessary) have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements, the vector attractions reduction requirements, the management practices and the site restrictions have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment.